

## **Identification of key sectors in a General Equilibrium Model: A comparative empirical analysis for Andalusian economy**

Topic: 811C CGE/econometric IO Modelling (2)

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The ability to represent and describe the interactions and flows in an economy and the possibilities of capture the multiple simultaneous relationships among economic agents, make the Computable General Equilibrium (CGE) models in very useful tools for economic purposes, allowing a counterfactual framework for ex ante analysis in the economic system.

In that sense it is possible to study the impact of exogenous shocks in the economy under this approach having like one of its main features the provision of a view of the redistribution of such impacts over all the economic activities with a high level of explanation based on assumptions of economic theory.

Using Social Accounting Matrices as databases it is possible to determine those economic sectors more relevant for the economic structure in quantitative terms, for the influence of one activity in each other sector and overall the economy. Originally, this has been a field studied in the interindustrial analysis and its techniques.

So, the purpose is to apply a traditional methodology (Hypothetical Extraction Method) for detection of key sectors inside a CGE model, comparing its results in both cases and capturing the missed interactions that traditional methodology neglects. Offering results that respect all the behavioral simultaneous equations that represent the functioning of an economic system.

This is an empirical work that analyzes the regional Andalusian economic during the period between 1990 and 2005 using regional Social Accounting Matrices for every five years. The results will allow us to observe the differences in both types of techniques in quantitative and qualitative terms and the reason of the differences in the determination of key sectors in an economy. Providing, in this sense, a new basis for useful analysis for economic policy decisions.